BOOK NOTICES.

Destructive and Useful Insects. By C. L. Metcalf and W. P. Flint. McGraw Hill Book Co. New York. \$7.50.

This book which includes 918 pages, with 561 illustrations, is an account of American insects as they affect the welfare of man. More than two-thirds of the text deals with the injurious and destructive activities of insects that affect agriculture, together with a consideration of general and special methods of combating them. This is the most valuable part of the book as it includes very full accounts of practically all the pests of importance which affect vegetable crops and fruits. With this is a chapter on household insects, one on insects that attack and annoy man and another on insects injurious to domestic animals. A chapter on the value of insects to man contains much interesting material which seldom receives space in entomological textbooks. There is also a brief treatment of the morphology and classification of insects. The illustrations are well selected, but are nearly all from other publications.

The authors are certainly to be congratulated in having gathered together a large mass of material into an extremely useful book, to which economic entomologist and others of their less practically inclined brethren will have frequent occasion to refer.

C. T. Brues.

Elementary Lessons on Insects. By James G. Needham. C. C. Thomas, Springfield Ill. and Baltimore Md. \$2.00.

This small volume of somewhat over 200 pages gives an account of the structure and development of insects together with a consideration of some of their more important economic relations. It is suitable for secondary schools, or summer classes as a text-book and should be valuable as a vade mecum for teachers who require a certain amount of entomological knowledge for the teaching of "nature study."

Ten of the more important orders of insects are considered with general reference to their structure, development and habits.

Interpolated through this part of the book are numerous laboratory and field exercises, which cover a wide variety of subjects and material, much wider than it would be possible for the average class or teacher to complete, even during the summer time. It should be easy, however, to select a part of the exercises for which material and time might be available.

C. T. BRUES.